

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/699,469
Inventor(s) : Heather Lynn Focht
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Title : Striped Liquid Personal Cleansing Compositions
Containing a Cleansing Phase and a Separate Benefit Phase
With Improved Stability

DECLARATION OF KARL SHIQING WEI UNDER 37 C.F.R. §1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
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Karl Shiqing Wei declares:

All statements made herein are true to the best of my knowledge, or, if made upon information and belief, are believed to be true.

I am a graduate of Pennsylvania State University, where I have received a Doctorate in Chemistry. Since 1994, I have been employed by The Procter & Gamble Company of Cincinnati, Ohio, assignee of the present application, where I am currently employed as a Principal Scientist. I have worked with personal cleansing compositions in the laboratory for about eleven years.

I am an inventor on the above-captioned patent application and I supervised the data collected for Table entitled "Striped Liquid Personal Cleansing Compositions Containing a Cleansing Phase and a Separate Benefit Phase With Improved Stability."

I have read the two main references cited against this application, Hayward and Mitra (U.S. Patent Nos. 6,534,456 B2 and 6,534,457 B2, respectively, both assigned to

Lever Home and Personal Care). I reviewed the examples in these two cases and selected exemplary compositions to recreate and test as described below. I recreated Example 2 of the Hayward patent ('456) as described beginning at Column 12, Lines 22 through 67. An Isotropic Side was prepared and a Lamellar side was prepared. The two different phases were mixed at a ratio of 1:99, 50:50, and 99:1. The ingredients are all common and commercially available.

Likewise, I recreated Example 1 of Mitra patent ('457) as described beginning at Column 11, Lines 6 through 54. A Stripe A was prepared and a Stripe B was prepared. The two different phases were mixed at a ratio of 1:99, 50:50, and 99:1. The ingredients are all common and commercially available.

A product made by the assignee of Mitra and Hayward, which has ingredients similar to those in the examples of Hayward and Mitra was purchased and tested as well. The product is called Dove All Day Deep Moisture and it is manufactured and sold by Lever Home and Personal Care.

Finally, a product made according to the claims of the present invention was prepared. The Inventive example is detailed in Table I, below. As required by the present claims, the surfactant phase has microspheres, water, surfactant and a structurant. The benefit phase is substantially anhydrous and substantially free of surfactant.

TABLE I

Ingredient	Olay Butter Ribbons wt%
I. Cleansing Phase Composition	
Miracare SLB-365 (from Rhodia) (Sodium Trideceth Sulfate, Sodium Lauramphoacetate, Cocamide MEA)	47.5
Guar Hydroxypropyltrimonium Chloride (N-Hance 3196 from Aqualon)	0.7
Sodium Chloride (Structurant)	3.5
Perfume and minors	3.0
Expancel 091 DE 40 d30 (Micro spheres from Expancel, Inc.)	0.5
Water	Q.S.
II. Benefit Pphase Composition	
Petrolatum (G2218 Petrolatum from Sonneborn)	70
Mineral Oil (Hydrobrite 1000 PO White MO from Sonneborn)	30
Volume Ratio of Cleansing Phase to Benefit Phase	50:50 v/v

All seven Comparative examples and the one Inventive sample were analyzed for lipid deposition on human skin. The lipid provides the skin moisturization desired by consumers. Thus, the greater the amount of lipid deposited on consumers' skin, the more desirable the product will be.

In-vivo Lipid Deposition via FTIR Panel

Lipid deposition of body wash prototypes is assessed through forearm wash protocol followed by FTIR measurement of the lipid deposition on skin/

The method uses a Smiths Detection Identify IR FTIR with 3 bounce diamond ATR. A macro program leads the panelist through the steps needed to measure the lipid deposition on the skin. The basic steps are:

1. The panelist signs in and verifies the products are available
2. Clean the ATR and verify with a background scan
3. The left arm is washed according to the protocol (See Protocol below)
4. The arm is placed on the ATR and 8 scans are taken (the scan is an IR absorbance spectrum of the surface of the skin, that finds the maximum height of the C-H stretching band and normalizes it for arm contact/pressure to the Amide I band of the skin)
5. The ATR is cleaned and verified again with a background scan
6. The right arm is washed and measured

The amount of lipid deposition on skin is determined by the FTIR intensity of C-H stretching mode on the forearm after washing with a body wash product under a controlled protocol.

EQUIPMENT AND MATERIALS:

1. Smiths Detection Identify IR FTIR with 3 bounce diamond ATR
2. Computer to control FTIR and collect data
3. Grams32 software with custom deposition macro
4. Controlled Temperature running Water 95-100F
5. Italian Puffs 2/panelist for body wash
6. 1ml Syringes
7. Control and test product

Body Wash Application PROTOCOL:

1. Sign in with panelist number.
2. Obtain correct coded product syringe for the left arm and puffs.
3. Fluff each puff by pulling nylon out from the center.
4. Saturate puff under running water for 5 seconds.
5. Holding the puff in the same hand (if you are washing the left arm, hold puff in left hand), wet forearm under running water for 5 seconds, letting water wash from the elbow to the wrist.

6. Dispense product into the hand opposite the arm being washed. Do not apply product directly to the arm- it leads to uneven deposition.
7. Rub product onto the inner forearm from the elbow to the wrist in long, continuous, circular strokes for 5 seconds. Rub your palm along the edge of your arm to remove any excess product sticking to your hand.
8. Without re-wetting the puff, LIGHTLY wash the inner forearm from the wrist to the elbow with the puff for 10 seconds in long, continuous, circular strokes, washing through the product with each stroke. The product should be foamy- if it is streaky, you are washing too hard.
9. Leave product on arm for 15 seconds.
10. Rinse forearm with water from inner elbow to wrist for 15 seconds.
11. Pat dry.
12. Air-dry for 30 seconds.
13. Place arm on FTIR and take reading. Be sure to read the part of the inner forearm that was washed.
14. Proceed with next arm.
15. Use 1ml. of product
16. After both arms have been read, post-wash both arms with soap provided

The results for Lipid deposition on human skin for the eight samples tested are provided in TABLE II below.

Lipid Deposition via FTIR Forearm Arm Wash Panel
TABLE II

Examples	Product	Lipid Deposition from FTIR Panel (ug/cm2)
Comparative 1:	US 6,534,456 Example 2 @1:99 Dispensing Ratio Between Stripe A and Stripe B	40.4
Comparative 2:	US 6,534,456 Example 2 @50:50 Dispensing Ratio Between Stripe A and Stripe B	51.4
Comparative 3:	US 6,534,456 Example 2 @99:1 Dispensing Ratio Between Stripe A and Stripe B	31.9
Comparative 4:	US 6,534,457 Example 1 @1:99 Dispensing Ratio Between Stripe A and Stripe B	40.4
Comparative 5:	US 6,534,457 Example 1 @50:50 Dispensing Ratio Between Stripe A and Stripe B	55.0
Comparative 6:	US 6,534,457 Example 1 @99:1 Dispensing Ratio Between Stripe A and Stripe B	41.6
Comparative 7:	Dove All Day Deep Moisture	52.6
	Average Lipid Deposition of 7 Comparative Samples	44.8
Inventive	Composition of Table I	97.7

	Inventive Composition Improved Lipid Deposition V. Comparative 5 (97.7-55.0/55.0)	78%
	Inventive Composition Improved Lipid Deposition V. Average of Comparative samples (97.7-44.8/44.8)	118%

This declaration is made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and may jeopardize the validity of the above-captioned patent application or any patent issuing thereon.

10/16/2008
Date

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18 U.S.C. §1001 Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or advice a material fact, or makes any false, fictitious or fraudulent statement or representation, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.